## **NOAA's Pacific Islands Region**

The Pacific Islands Region is the largest NOAA region geographically, encompassing 50% of the U.S. Exclusive Economic Zone. This unique geography is also tied to a high vulnerability to hazards and climate variability that threaten the Islands' endemic species and high number of endangered species.

## **Geography and Environment**

The NOAA Pacific Islands Region is composed of the State of Hawai`i, the territories of Guam and American Samoa, the Commonwealth of the Northern Mariana Islands (CNMI), the Republic of Palau, Federated States of Micronesia and the Republic of the Marshall Islands. This is the largest NOAA region geographically, spanning several time zones, making communication, travel, procurement and training a challenge. America's day begins in Guam and CNMI (UTC + 10) and ends in American Samoa (UTC -11).

The Pacific Ocean is the Earth's largest body of water, with a surface area 180 million km². Its waters contain more islands and reefs than all the other oceans and seas combined – an estimated 20,000 to 30,000. It also contains the deepest ocean trenches in the world. At irregular intervals, El Niño deflects the Humboldt Current causing intermittent fisheries collapses, mass migrations of birds and fish, droughts and torrential rainfall. Nearly the entire rim of the Pacific basin is ringed with volcanoes and earthquake areas, making it vulnerable to a host of natural hazards such as tsunamis, tropical cyclones, coastal erosion, high surf, and floods.

## **Social and Economic Context**

The region is culturally, socially and politically diverse. While English is a common language, Samoan, Hawaiian, Chamorro, and Carolinian are among the many languages spoken in the islands on a daily basis. There are a wide variety of island governance structures and maturity - State, territory, trust relationships.

The main industries in the islands are fisheries, tourism and government. Tourism and military expansion, especially in Guam and CNMI are transforming the cultural, social, and political landscape of the region. Basic infrastructure is inadequate in many areas to support commerce and economic development in key sectors like tourism, agriculture and fisheries, with attendant environmental and community impacts. Communication infrastructure is also sparse and dated, making disaster response difficult.

## Capabilities and Challenges

The geographic size of the Pacific Islands region and the cultural and economic diversity requires NOAA to leverage established vehicles for partnership at all levels – local, state, national, and international. The overarching challenge is to help these jurisdictions respond appropriately to the ecosystem impacts of growth while reducing the impacts of hazards.

The islands are highly dependent on their freshwater resources and are susceptible to both drought and flooding. NOAA works with island resource managers to develop products, tools and services, including outreach, that take into account the islands' unique geology and hydrology in managing this critical resource.

With a population of over 2 million, all residing in the coastal zone, the area is particularly vulnerable to natural hazards. NOAA is partnering with regional and international organizations to reduce the environmental, social, and economic impacts of hazards by resilience assessment and measurement, tool development, improved forecasting, and data integration.

Stewardship of the unique natural resources of the Pacific Islands requires an ecosystem perspective. NOAA provides critical services for fisheries, marine resources, and endangered species management, and is developing a comprehensive ecosystem research plan that integrates vital socio-economic data.

